IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 4 and 7-9, and CANCEL claim 5 in accordance with the following:

1. (CURRENTLY AMENDED) A gas laser oscillator, comprising:

an electric discharge section generating an electric discharge in a gas laser medium for pumping the gas laser medium;

a power source, connected to said electric discharge section, supplying electric discharge power thereto; ~~and~~

a magnetic field applying unit applying a magnetic field to said electric discharge section in a direction different from a direction of the electric discharge and selectively changing at least one of an intensity and a direction of the magnetic field thereby to change a lateral mode of an output of the gas laser oscillator; and

a plurality of electric discharge sections,

wherein said magnetic field applying unit applies the magnetic field in one of the plurality of electric discharge sections in a direction different from a direction of magnetic field in another of the plurality of electric discharge sections..

2. (PREVIOUSLY PRESENTED) A gas laser oscillator according to claim 1, wherein said magnetic field applying means comprises:

coils wound around said electric discharge section; and

a direct-current coil excitation unit flowing direct current of a selectively changeable magnitude in the coils to apply a magnetic field of corresponding, selectively changeable intensity to said electric discharge section.

3. (PREVIOUSLY PRESENTED) A gas laser oscillator according to claim 1, wherein said magnetic field applying unit comprises:

coils wound around said electric discharge section; and

an alternating-current coil excitation unit flowing alternating current of a selectively changeable magnitude in the coils, to apply a magnetic field of corresponding, selectively changeable intensity to said electric discharge section.

4. (CURRENTLY AMENDED) A gas laser oscillator according to claim 3, wherein said magnetic field applying unit synchronizes the magnetic field with the discharge current applied to the coils.

5. (CANCELLED)

6. (PREVIOUSLY PRESENTED) A gas laser oscillator according to claim 1, wherein:

the electric discharge section comprises an electric discharge tube to which the power source is connected by electrodes located at opposite sides of the discharge tube so that the electric discharge takes place between opposite sides of the discharge tube;

the magnetic field applying means includes coils wound around said electric discharge section and coil excitation means for causing current to flow in said coils in such manner as to produce a magnetic flux in said electric discharge section in an axial direction thereof, thereby to produce an electromagnetic force acting on the electric discharge in a direction transverse to the direction of the electric discharge.

7. (CURRENTLY AMENDED) A method of operating a gas laser oscillator having a gas laser medium in ~~an~~ plurality of electric discharge sections, comprising:

supplying alternating electric discharge power to the electric discharge sections to generate electric discharges in the gas laser medium for pumping the gas laser medium; ~~and~~

applying a magnetic field to the electric discharge sections in a direction different from a direction of the electric discharge and selectively changing at least one of an intensity and a direction of the magnetic field thereby to change a lateral mode of an output of the gas laser

oscillator; and

applying the magnetic field in one of the plurality of electric discharge sections in a direction different from a direction of magnetic field in another of the plurality of electric discharge sections.

8. (CURRENTLY AMENDED) The method as recited in claim 7, wherein:

the applying a magnetic field further comprises causing current to flow in ~~the~~ coils wound around the electric discharge section so as to produce a magnetic flux in an axial direction in the electric discharge section and thereby produce an electric magnetic force acting on the electric discharge in a direction transverse to the direction of the electric discharge.

9. (CURRENTLY AMENDED) The method as recited in claim 7, further comprising:

maintaining the magnetic field during respective half cycles of the alternating energy, so as to create symmetrical, respective electric discharges which spread to corresponding, opposite outer sides of ~~the~~an electric discharge tube in each cycle.

10. (PREVIOUSLY PRESENTED) The method as recited in claim 7, further comprising selectively changing the intensity of the magnetic field to a selected level, within a range from substantially no magnetic flux producing a beam mode approximating a Gauss mode, to an intense magnetic flux producing a ring mode.

11. (PREVIOUSLY PRESENTED) The method as recited in claim 7, further comprising selectively changing the intensity of the magnetic field to a selected level within a range, from a relatively low level intensity producing a beam mode of an approximately trapezoidal shape to a medium level intensity producing a beam mode having an angled shape with protruding sides, to a higher medium level intensity producing a beam mode of a double peak shape, and to a maximum level intensity producing a beam mode of a ring mode.

12. (PREVIOUSLY PRESENTED) The method as recited in claim 11, further comprising selectively changing the intensity of the magnetic field to a selected level, within a range from a relatively low level intensity producing a beam mode of an approximately

trapezoidal shape to a medium level intensity producing a beam mode having an angled shape with protruding sides, to a higher medium level intensity producing a beam mode of a double peak shape, and to a maximum level intensity, producing a beam mode of a ring mode.